

# GRAY & PAPE

---

## HERITAGE MANAGEMENT



*Archaeological Intensive  
(Locational) Survey of the  
Waltham Fernald Fenced  
Area (WLT.929), Walter E.  
Fernald State School,  
Waltham, Middlesex County,  
Massachusetts*

**PREPARED FOR:**

City of Waltham  
City Hall  
610 Main Street  
Waltham, Massachusetts 02452

**PREPARED BY:**

Gray & Pape  
60 Valley Street  
Suite #103  
Providence, Rhode Island 02909





**GRAY & PAPE**  
HERITAGE MANAGEMENT

Project No. 17-77401.001

**Archaeological Intensive (Locational) Survey of the Waltham Fernald  
Fenced Area (WLT.929), Walter E. Fernald State School, Waltham,  
Middlesex County, Massachusetts**

Prepared for:  
City of Waltham  
    City Hall  
    610 Main Street  
Waltham, Massachusetts 02452

Prepared by:  
Kimberly Smith, M.A.  
Christopher L. Donta, Ph.D.

Gray & Pape  
60 Valley Street  
    Suite #103  
Providence, Rhode Island 02909

---

*Christopher Donta*  
Christopher Donta, Ph.D.  
Senior Principal Investigator

September 7, 2017



## **ABSTRACT**

An archaeological intensive (locational) survey was conducted within a fenced area (WLT.929) of the Walter E. Fernald State School (WLT.AB) to investigate the function of this resource, particularly with respect to it containing a possible unmarked cemetery, and in fulfillment of a stipulation of a Memorandum of Agreement. Consultation and background research indicates that this small fenced area, 10 by 17 meters in size, including adjacent rectangular and circular areas surrounded by iron fences, likely functioned as recreational or physical therapy areas for patients in this part of the facility. Excavations detailed that a concrete pad covered the entire fenced rectangular area, and that the iron fence and pad were constructed in one episode. Similarly, the circular area included a concrete sidewalk around the inside perimeter, with the iron fence encased in the concrete. A trench excavation across the circular area interior documented disturbed soils over natural substrata. No evidence of any burials was identified. No further survey is recommended.



# TABLE OF CONTENTS

ABSTRACT .....	i
TABLE OF CONTENTS .....	ii
LIST OF FIGURES .....	iii
1.0 INTRODUCTION .....	1
1.1 Project Overview .....	1
1.2 Authority.....	1
1.3 Report Organization .....	4
1.4 Personnel .....	4
1.5 Acknowledgements.....	4
2.0 STUDY METHODS .....	5
2.1 Background Research .....	5
2.2 Archaeological Intensive (Locational) Survey Field Methods .....	6
3.0 ARCHAEOLOGICAL POTENTIAL OF THE PROJECT AREA .....	7
4.0 ARCHAEOLOGICAL INTENSIVE (LOCATIONAL) SURVEY RESULTS .....	13
5.0 CONCLUSIONS AND RECOMMENDATIONS.....	24
6.0 REFERENCES CITED .....	25

APPENDIX A: BACKGROUND RESEARCH (GREEN 2017 REPORT)

APPENDIX B: PROFESSIONAL SURVEY MAP OF THE PROJECT AREA SHOWING THE LOCATION OF THE FENCED AREAS, THE TWO EXCAVATED TRENCHES, AND NEARBY BUILDINGS.

## LIST OF FIGURES

Figure 1-1. Location of Waltham Fernald fenced area in Waltham, Middlesex County, Massachusetts.....	2
Figure 1-2. Circular fenced area of WLT.929, view to the southeast.....	3
Figure 1-3. Rectangular fenced area of WLT.929, view to the southwest.....	3
Figure 3-1. Location of Waltham Fernald fenced area, WLT.929, overlying a 1918 Sanborn Map....	9
Figure 3-2. Location of Waltham Fernald fenced, WLT.929, on an 1892 map of Waltham.....	10
Figure 3-3. Location of Waltham Fernald fenced area, WLT.929, on the 1900 map of Waltham....	11
Figure 3-4. Location of Waltham Fernald fenced, WLT.929, on the 1946 USGS topographic quadrangle of Waltham.....	12
Figure 4-1. Photograph showing the concrete slab found within the rectangular fenced area. ....	14
Figure 4-2. Photograph showing the excavated trench in the rectangular fenced area, running east to west, exposing the concrete slab found beneath the layer of topsoil. ....	15
Figure 4-3. Concrete walkway found within the perimeter of the circular fenced area, view to the east, taken on the southern edge of the fenced area.....	16
Figure 4-4. Concrete walkway found within the perimeter of the circular fenced area, view to the south, taken on the eastern edge of the fenced area.....	17
Figure 4-5. Concrete walkway semi-circular bump out for the placement of the wrought iron fencing. ....	18
Figure 4-6. Excavated trench within the circular fenced area, view to the west from the eastern edge of the area.....	19
Figure 4-7. Modified Narragansett soils identified in the trench. ....	20
Figure 4-8. Modified Narragansett soils and fill associated with the construction of the concrete walkway identified in the eastern edge of the trench.....	21
Figure 4-9. Boulders left in situ marking the edge of the 2-m trench adjacent to the concrete walkway. Note the red arrows are marking the boulders.....	22

# 1.0 INTRODUCTION

---

## 1.1 Project Overview

Gray & Pape, Inc. (Gray & Pape), is pleased to present the following archaeological intensive (locational) survey report for the City of Waltham for the investigation of the fenced area (site WLT.929) at the Walter E. Fernald State School (WEFSS) (site WLT.AB) (Project) site in Waltham, Middlesex County, Massachusetts (Figures 1-1 through 1-3). This Project is the result of proposed demolition and construction related to the new Waltham High School. Because the project is located on the property of the Fernald School/Fernald Development Center, and the property was the subject of a Memorandum of Agreement (MOA) between the Massachusetts Division of Capital Asset Management and Maintenance, the City of Waltham, and the Massachusetts Historical Commission (MHC), an archaeological survey was required. In the MOA, Stipulations III, New Construction (C) states:

"If construction or modification to the landscape is proposed in the vicinity of the West Building, an archaeological survey must be conducted in the area identified in the National Register Nomination as 'a small area...enclosed by a decorative wrought iron fence,' to determine if an unmarked cemetery is present that should be avoided."

This survey was conducted to meet the survey requirements of the MOA. The fenced area at WLT.929 measures approximately 0.0079 hectares (ha) and consists of two adjacent fenced areas, one rectangular, and one circular. The rectangular area measures approximately 6 meters (m) east to west by 8 m north to south. The circular area has a diameter

of approximately 10 m. This fenced in area comprises the Project Area of Potential Effect (APE). This understanding of the project is based upon a Notice to Proceed provided to Gray & Pape by the City of Waltham in May 2017.

## 1.2 Authority

Gray & Pape conducts archaeological investigations in accordance with Federal and State legislation. Procedures are in compliance with legislation and regulations concerning the impact to archaeological properties from federally funded or permitted activities. These laws and guidelines include the National Historic Preservation Act of 1966 (PL 89-665, 16 USC 470 as amended) (NHPA); the National Environmental Policy Act of 1969 (PL 91-990, 42 USC 4321) (NEPA); Executive Order 11593, 1971 (16 USC 470); Procedures for the Protection of Historic and Cultural Properties (36 CFR VIII, 800); Guidelines for the Recovery of Scientific, Prehistoric, Historic, and Archaeological Data: Methods, Standards, and Reporting Requirements (36 CFR 66); and the Archaeological and Historic Preservation Act of 1974 (PL 93-291 as amended). State legislation dealing with the protection of historic and archaeological resources includes Massachusetts General Laws, Chapter 9, Sections 26-27C; the Underwater Archaeology Act (Chapter 989, Acts of 1973); and the Massachusetts Environmental Policy Act (MGL, Chapter 30, amended by Chapter 947 of the Acts of 1977). Massachusetts archaeological permit regulations are outlined in 950 CMR 70.00. In compliance with Massachusetts General Laws Chapter 9, Section 27, Brona Simon, the State Archaeologist, issued Massachusetts State Permit number 3767 for this project.

Lexington USGS 24k Topographic Quadrangle





Figure 1-2. Circular fenced area of WLT.929, view to the southeast.



Figure 1-3. Rectangular fenced area of WLT.929, view to the southwest.

## **1.3 Report Organization**

This report contains five parts. The first provides an outline of the background and goals of the project. The second section describes the methodology used in conducting the survey. The third section details the research findings and historical use of the Project area, including its potential to yield unmarked burials. The fourth section described the results of the intensive (locational) survey. The final chapter provides recommendations on how to proceed regarding cultural resources.

## **1.4 Personnel**

The project was directed by Senior Principal Investigator Christopher Donta, Ph.D., who

developed the research design, completed the permitting, oversaw the fieldwork, and contributed to the report. Principal Investigator Kimberly Smith, M.A., directed the fieldwork, wrote the majority of the report, and completed the project mapping. Sarah E. Holland, Ph.D., edited the report and oversaw its production.

## **1.5 Acknowledgements**

The project team would like to thank Don Cusano, Joseph Pedulla, and Diana Fraser at the City of Waltham; Alex Green formerly of the Waltham Historical Commission; Dan Pereira, Todd Chapman, and Chuck Samiotes of Samiotes Consultants, Inc.; and the staff at the MHC.

## 2.0 STUDY METHODS

---

The purpose of the background research and intensive (locational) survey is to provide data-driven recommendations regarding the likelihood for proposed locations of ground disturbance to contain archaeological resources. The development of these recommendations is based on two steps: 1) the completion of background research; and 2) a subsurface survey of impact locations to ground truth the potential for the presence of archaeological sites. This section outlines the methodology utilized to complete these two steps.

### 2.1 Background Research

The background research for this Project included a review of the MHC site files for archaeological sites and architectural resources. The MHC maintains a record of all previous archaeological surveys (MHC 2015), as well as known Native American (pre-Contact) archaeological sites, and a separate database of archaeological sites dating to the historical period (MHC site files). The Native American sites are identified according to a national system developed by the Smithsonian Institution in the first half of the twentieth century. Each state is assigned a number based on alphabetic sorting, from 1–48, with Massachusetts being nineteenth (Alaska and Hawaii were added after they became states, as numbers 49 and 50). Sites found within each state are divided by county, and then numbered in sequence within that county. For example, Native American site number 19-MD-2 represents the second site recorded within Middlesex County in the state of Massachusetts. Historical archaeological sites in Massachusetts are numbered according to the town where they are located and the sequence of their inclusion in the state site files, using a three-letter code for the town name. The first historical archaeological site in Waltham, for instance, is designated WLT.HA.2 (i.e., WLT for Waltham; HA for historical archaeological).

Records were searched for the town of Waltham for archaeological resources within 1 kilometer (km) of the Project. Copies were made of all forms documenting previously identified archaeological sites. In addition, historical maps and town histories maintained at the MHC for the towns were reviewed.

Architectural resources located within the defined Project APE were identified using the MHC's Massachusetts Cultural Resource Information System (MACRIS). This online database, with the associated MACRIS maps that provide geospatial data on architectural resources, provides information on the location of previously identified architectural resources.

Above-ground historical resources are given the same three-letter town designation as historical archaeological resources (for example, WLT for Waltham), followed by sequential numbers for the resource. Buildings start at the number one, as in WLT.001 for the first historical building recorded in Waltham. Burial grounds are numbered in the 800s (for example, WLT.801). Historical monuments and objects are numbered in the 900s (for example, WLT.901). Historical areas are designated alphabetically; for example, WLT.A is the first historical area in Waltham, and WLT.B is the second.

Gray & Pape identified all previously surveyed architectural resources within, or immediately adjacent to, the defined Project APE by comparing the APE to the MACRIS maps. All resources included within, or immediately adjacent to, the APE were then reviewed in MACRIS.

In addition, the background research included a study of historical maps of the APE. The mapping review included maps of the late eighteenth and nineteenth century, early topographic maps, aerial photography of the

APE, and topographic maps of the twentieth century.

Finally, background research included consultation with Mr. Alex Green, former Chair of the Waltham Historical Commission, who has conducted extensive research on the Fernald property, and specifically regarding the fenced area in question.

## 2.2 Archaeological Intensive (Locational) Survey Field Methods

The archaeological intensive (locational) survey involved the excavation of two trenches bisecting each portion of the Project area (the circular and the rectangular areas). The trench within the rectangular portion of the Project

area measured 5.6 m in length, east to west, by 0.82 m in width, north to south. This trench was excavated in the center of the rectangular fenced area. The trench within the circular portion of the Project area measured 7.2 m in length, east to west, by 0.82 m in width, north to south. Upon the identification of concrete within the rectangular fenced area, a probe was used to test every square meter of the area to confirm the presence of concrete beneath approximately 6–10 centimeters (cm) of soil.

The excavations were focused on documenting the construction of the fenced areas and, where possible, exploring the soil profile to assess the presence or absence of intact natural soils. The two excavated trenches were successful in both aims, leading to conclusions about the origin and function of the fenced areas.

## 3.0 ARCHAEOLOGICAL POTENTIAL OF THE PROJECT AREA

---

The project location is not known to contain any previously defined archaeological sites. No sites of either Native American origin or from the historical period are mapped within, or near, the APE on the Inventory of Historical and Archaeological Assets of the Commonwealth maintained at the MHC. Background research indicates that the Project area was farmland or woodlands prior to construction of the original school buildings in the 1890s. Numerous above-ground structures associated with WEFSS are mapped in MACRIS, including buildings to the northwest, north, and east.

The APE is located on a small hillside terrace above Clematis Brook. Historical buildings lie within 50 m of the location in three directions. The possibility of historical sites in the APE is considered high. While no documentary information is known to exist regarding the function of the fenced areas, it is expected that it is associated with the use of WEFSS in the twentieth century.

No Native American archaeological sites have been identified within the WEFSS campus. However, one site has been recorded that lies approximately 600 m to the south of the APE. This is the Clematis Brook site (19-MD-365), reportedly a location for artifact collection recorded by Harvard University, including finds of Greene, Woodland Lanceolate, Susquehanna, and other untyped projectile points.

Research conducted by Alex Green suggests that the fenced-in area is likely not the remnants of a cemetery, but rather an activity area for residents of the facility (Appendix A). The material used to create the fencing is not typical of the wrought-iron fencing used at small institutional cemeteries elsewhere in New England. It more closely resembles those used for handrails and outdoor activity areas,

including a swing set found within the facility perimeter. Mr. Green (2017) specifically states that the rounded post-heads “resemble attempts made across the site by Fernald, his architect, and their successors, to reduce sharp corners that patients might bump or fall into.” Furthermore, Mr. Green has found no evidence of a documented cemetery within the facility (Green 2017:5). Documentary evidence from the facility files discuss the transfer of cemetery plots to Fernald for his use at Waltham’s municipal cemetery in 1898. In 1898, a state law was altered forcing institutions, such as WEFSS, to give unclaimed bodies or body parts, addressed as anatomical material, to medical institutions for anatomical research. A letter dated May 28, 1910, from Harvard and Tufts medical schools, states that they are desperately in need of anatomical material (Green 2017:6). A letter dated December 24, 1912, from Fernald to Reverend Timothy Brosnahan, of Waltham’s St. Mary’s Parish, requested the ability to inter unclaimed children of faith in the parish cemetery. Additionally, an undated corpse ticket was identified within the site’s files, demonstrating that bodies had been transported from the facility. In summation of Mr. Green’s work, it is unlikely that this particular location was utilized as a cemetery. In fact, it is unlikely that human remains were buried on the site of the facility, but rather were arranged to be buried elsewhere or transferred as anatomical material (Green 2017; Appendix A).

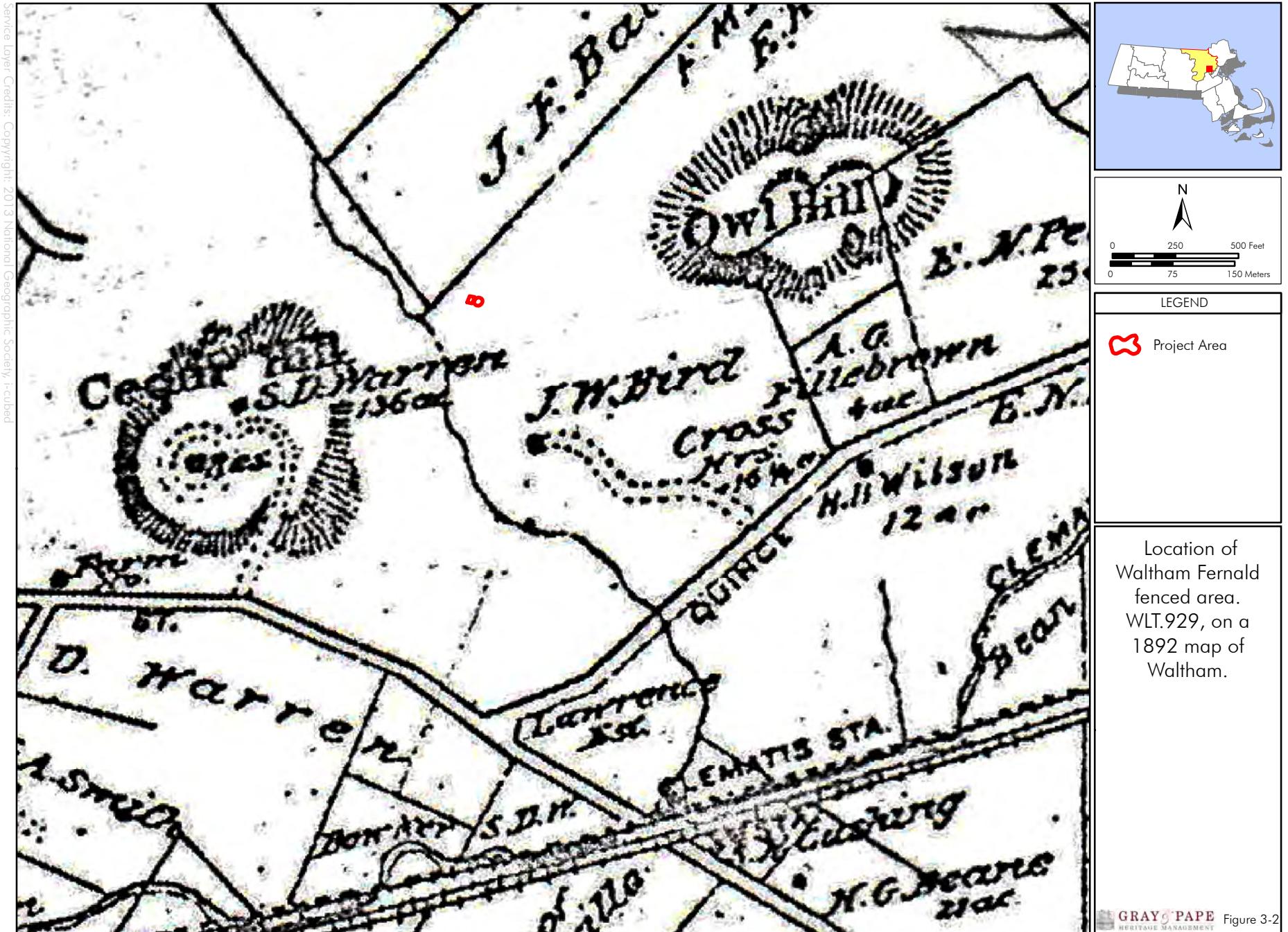
According to a 1918 Sanborn Map (Sanborn 1918), the fenced area likely overlays pipes between buildings as well as fire hydrants, which would also suggest it would be unlikely to contain burials (Figure 3-1). Further, maps dating between 1892 (City of Waltham 2017) and 1946 (USGS 1946) do not appear to have a structure or cemetery mapped in this location (Figures 3-2 through 3-4). Given the lack of

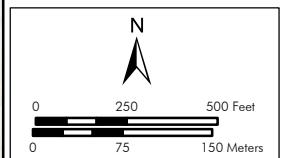
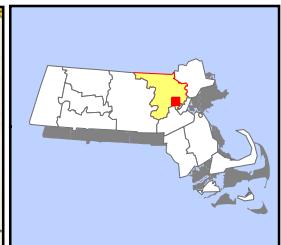
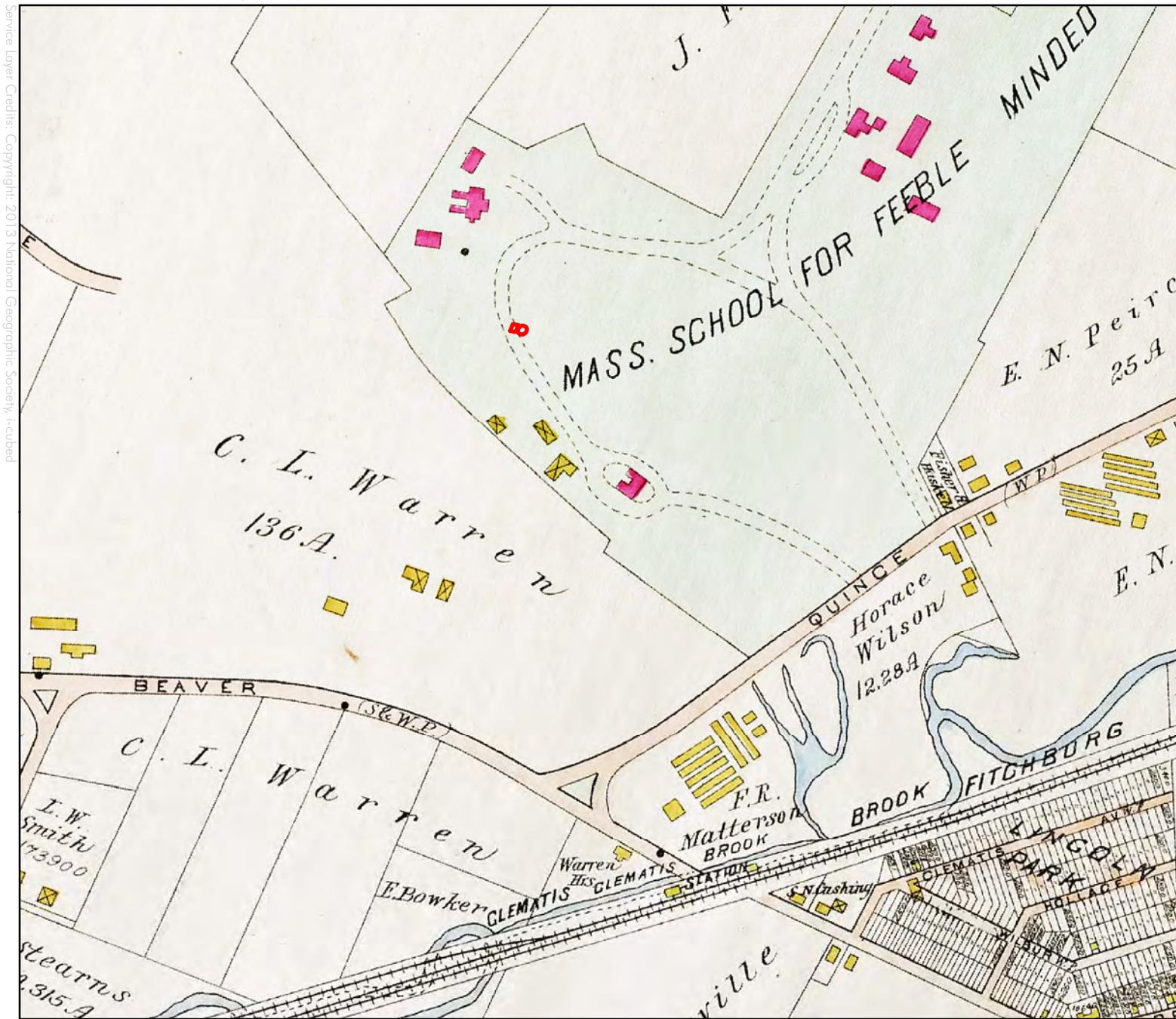
demarcation on Sanborn maps, as well as topographic quadrangles, and the type of fencing, the fenced area at the WEFSS was believed to be unlikely to yield unmarked

burials. Rather, it was likely used as an area for walking and general exercise for some of the facility's disabled patients.

Service Layer Credits: Copyright: 2013 National Geographic Society i-cubed



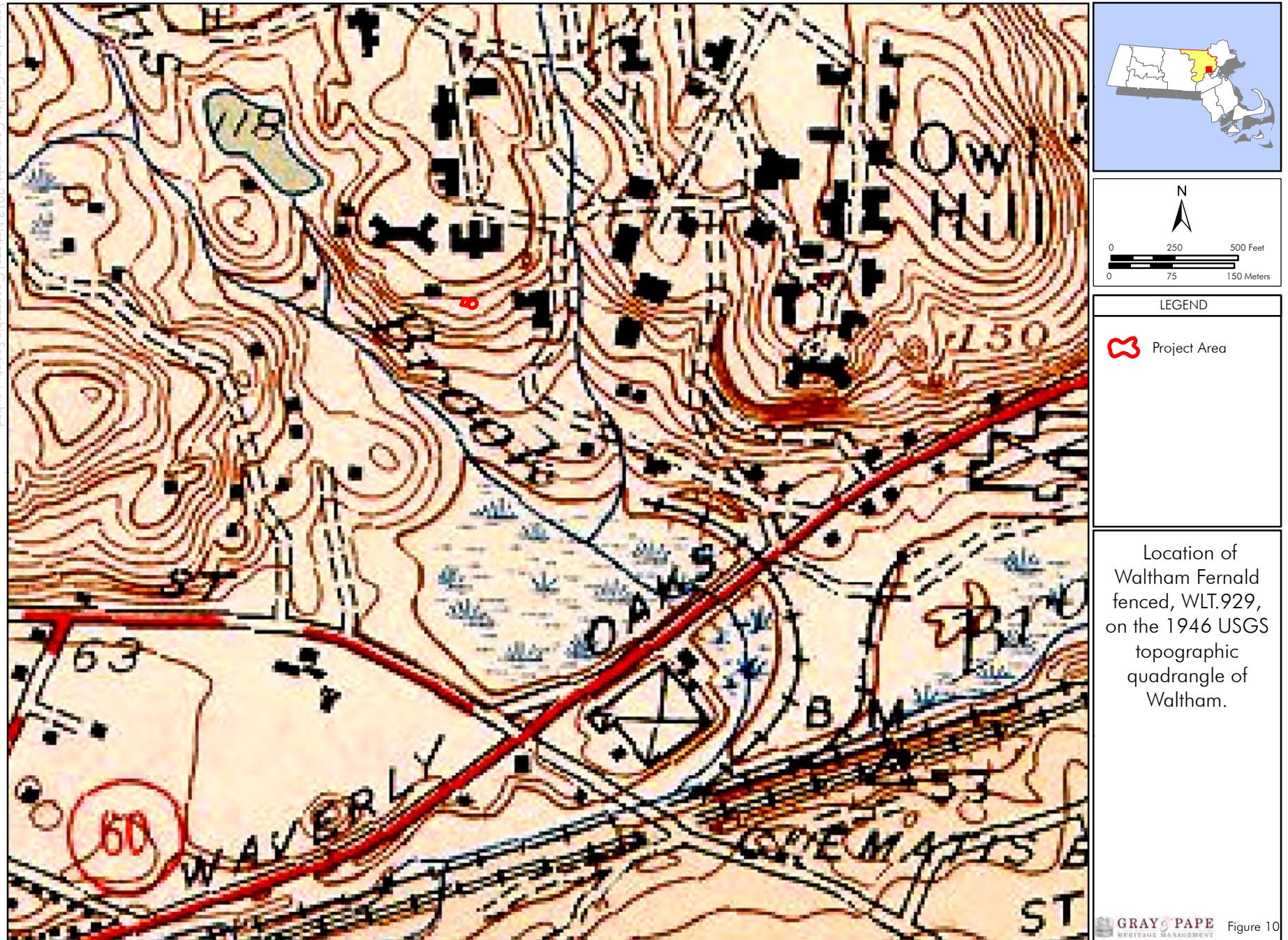




## LEGEND

Project Area

Location of Waltham Fernald fenced area, WLT.929, on the 1900 map of Waltham.



## 4.0 ARCHAEOLOGICAL INTENSIVE (LOCATIONAL) SURVEY RESULTS

---

An archaeological intensive (locational) survey was conducted on July 31, 2017, at site WLT.929. The scope of work (SOW) originally proposed the excavation of up to 11 trenches, five in the rectangular fenced area and six in the circular area. However, due to the presence of a concrete pad and concrete sidewalk, the testing strategy was altered to the excavation of a single trench in both fenced areas (Appendix B).

An impenetrable layer of concrete was found underlaying the entirety of the rectangular fenced area. A single trench, measuring 5.6 m in length, east to west, by 0.82 m in width, north to south, was excavated in the center of the area to expose this concrete for documentation (Figures 4-1 and 4-2). The remaining portion of this fenced area was probed within each square meter ( $m^2$ ) of the area to confirm the presence of concrete beneath approximately 6–10 cm of soil. The concrete pad extends across the entire rectangular area, from fence post to fence post, with the iron posts set into the concrete.

A concrete ring, or sidewalk, was identified on the interior of the circular, fenced area. This concrete sidewalk was found around the entire interior perimeter of the circular fence and measured 1.4 m in width (Figures 4-3 and 4-4). The unpaved area inside the center of the sidewalk measured approximately 7 m in diameter, and included one 38 cm diameter tree, and one 45 cm diameter tree. The concrete sidewalk was poured at the same time as the iron fence was installed, as the fence posts are set into the concrete, using semicircular post bump-outs (Figure 4-5).

A trench was excavated across the center of the circular area, in a north-south direction. The trench measured 7.2 m in length by 0.82 m in width. Soils in the trench were found to contain modified Narragansett soils (USDA 2017) (Figures 4-6 and 4-7). On average, the trench was excavated to a depth between 35 and 50 cm. The soils consisted of a modern very dark grayish brown (10YR 3/2) silt loam A horizon, extending from the ground surface to approximately 10 cm below. This overlaid a mottled strong brown (7.5YR 5/8) silt loam layer that extended to approximately 25 cm below the ground surface. This layer was filled with gravels where immediately adjacent to the concrete, as a fill layer for bedding the concrete sidewalk. Beneath this strong brown layer was a yellowish brown (10YR 5/6) silt loam layer that extended beyond 45 cm below the ground surface in some areas. These soil deposits were thicker in the eastern portion of the trench, nearest the concrete sidewalk. There, the A horizon measured approximately 30 cm thick, and overlaid a layer of thick fill that extended beyond 1.10 m in depth (Figure 4-8). This fill contained historical glass, leather, and likely pipe wrapping, which may have contained asbestos.

No evidence of burials or grave shafts was present in the circular area. Disturbance was evident related to bedding for the sidewalk, and a trench cut for the bedding, following the inside of the circular limits of the concrete, with larger cobbles and boulders that extended about 2 m toward the center of the circle from the edge of the sidewalk (Figure 4-9). In the center of the circle, natural Narragansett soils were found with an intact C horizon present at approximately 1 m below the ground surface.



Figure 4-1. Photograph showing the concrete slab found within the rectangular fenced area.



Figure 4-2. Photograph showing the excavated trench in the rectangular fenced area, running east to west, exposing the concrete slab found beneath the layer of topsoil.



Figure 4-3. Concrete walkway found within the perimeter of the circular fenced area, view to the east, taken on the southern edge of the fenced area.



Figure 4-4. Concrete walkway found within the perimeter of the circular fenced area, view to the south, taken on the eastern edge of the fenced area.



Figure 4-5. Concrete walkway semi-circular bump out for the placement of the wrought iron fencing.



Figure 4-6. Excavated trench within the circular fenced area, view to the west from the eastern edge of the area.



Figure 4-7. Modified Narragansett soils identified in the trench.



Figure 4-8. Modified Narragansett soils and fill associated with the construction of the concrete walkway identified in the eastern edge of the trench.



Figure 4-9. Boulders left in situ marking the edge of the 2-m trench adjacent to the concrete walkway.  
Note the red arrows are marking the boulders.

The excavations determined that both the rectangular area and the circular area were constructed in a single episode, in which concrete was poured for the rectangular pad and the circular sidewalk, and the rounded iron fence set in the concrete. The rectangular and circular area fences are connected to form a single continuous barrier, with an entrance on the north side. The flat pad of the rectangular area, and the continuous sidewalk in the circular area, argue for this area being created for walking and other exercises. As Green states in his report, "The tree at the center of the wrought-iron area, the flat surface, and the

small area, seem designed to provide a natural setting for a slow-moving person with severe disability." (Green 2017:5).

Although the rectangular area was not investigated below the concrete pad, it was the existence of the wrought-iron fence, which was found to be set into the concrete pad, that raised the question of this being an unmarked cemetery. Further, excavations in the center of the circular area, which was unpaved, found only natural soils and disturbance related to the construction of the sidewalk.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

---

Gray & Pape conducted an archaeological intensive (locational) survey for the Waltham fenced area (site WLT.929) within the WEFSS (site WLT.AB) for the City of Waltham, Middlesex County, Massachusetts, under permit #3767 from the State Archaeologist of Massachusetts.

Background research indicated no recorded evidence of a cemetery in use at the WEFSS, and that the fenced area was likely an outdoor walking and physical therapy area for patients. This conclusion is in line with the precepts Fernald espoused, such as "sense training," and the construction of the fenced area is complimentary with other construction at the site designed for active patient use.

The fieldwork discovered that the entire rectangular area is sitting on a concrete pad,

and that the circular area includes a continuous circular sidewalk. The iron fence posts are set in the concrete, and the fence of both areas is connected, to form a single enclosed area. No evidence of grave shafts was found in the trench excavated across the center of the circular areas, although disturbance related to the sidewalk construction was evident.

Gray & Pape believes that the demonstrated single construction episode, and nature of the construction, concur with the background research that indicates that WLT.929 was an outdoor recreational area for use by WEFSS patients constructed sometime in the twentieth century. The fieldwork did not find any indications of unmarked burials.

Gray & Pape does not recommend any further research for this project at WLT.929.

## 6.0 REFERENCES CITED

---

---

City of Waltham

2017 *Historical Maps of Waltham - 1892 Waltham Map.*

[http://www.city.waltham.ma.us/sites/walthamma/files/file/file/1892\\_waltham\\_map.jpg](http://www.city.waltham.ma.us/sites/walthamma/files/file/file/1892_waltham_map.jpg).

Accessed September 2017.

Green, Alex

2017 Preliminary Historical Overview and Analysis Regarding Potential Human Remains at the Walter E. Fernald Developmental Center. Unpublished report in the files of Gray & Pape, Providence.

Massachusetts Historical Commission (MHC)

2015 *Bibliography of Archaeological Survey and Mitigation Reports: Massachusetts. 2015 Supplement.* Massachusetts Historical Commission, Office of the Secretary of State, Boston.

Various dates Archaeological site forms on file with the Massachusetts Historical Commission, Office of the Secretary of State, Boston.

Sanborn, Daniel Alfred

1918 *Waltham, Massachusetts, Sheet 56.* Sanborn Fire Insurance Maps. Sanborn Map Company, Colorado Springs.

Stadly, George W.

1900 *Atlas of Middlesex County, Massachusetts, Volume 1.* Geo. W. Stadly and Co., Boston.

United States Department of Agriculture (USDA)

2016 Online Soil Survey for Middlesex County, Massachusetts.  
<http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed September, 2016.

United States Geological Survey (USGS)

1946 Lexington Quadrangle, 7 ½-minute series, Massachusetts (Middlesex County), 1:31,680 scale. Washington, D.C.



*This page intentionally left blank.*

## **APPENDIX A: BACKGROUND RESEARCH (GREEN 2017 REPORT)**



*This page intentionally left blank.*

**Preliminary Historical Overview and Analysis  
Regarding Potential Human Remains  
at the Walter E. Fernald Developmental Center**

**Alex Green  
May 31, 2017**

**Prepared at the Request of  
Christopher Donta, PhD  
Senior Principal Investigator  
Gray & Pape Heritage Management  
60 Valley St, St 103  
Providence, Rhode Island**

## **Contents**

- 1. Scope of Request**
  - 2. Qualifications**
  - 3. Background**
  - 4. Historical and Archaeological Analysis: Challenges and Avenues**
  - 5. The Wrought-Iron Fence**
  - 6. Preliminary Results of Archival Research**
  - 7. Thinking Beyond a Cemetery**
  - 8. Possible Locations of Historical Resources**
  - 9. Municipal Resources for Conducting Historical Analysis**
  - 10. Related Policy Issues**
  - 11. Conclusion**
- Appendix: Images of Historical Documents**

## **1. Scope of Request**

Gray & Pape has been hired by the City of Waltham to conduct an archaeological survey at the Walter E. Fernald National Register Historic District in order to locate human remains in accordance with various historic provisions, including a 2014 Memorandum of Agreement (MoA) between the City of Waltham, the Waltham Historical Commission (WHC), the Division of Capital Asset Management and Maintenance (DCAMM) and the Massachusetts Historical Commission (MHC).

In order to understand (a) whether archaeological analysis will be the first and best way to determine whether human remains are present at the Walter E. Fernald National Register Historic District, and (b) where those remains would be located, Gray & Pape requested assistance identifying and interpreting the existing historical record and its relationship to the aforementioned agreements and provisions.

## **2. Qualifications**

Alex Green was chairperson of the Waltham Historical Commission in 2014, during which time the City of Waltham acquired the 196-acre Walter E. Fernald Developmental Center from the Commonwealth of Massachusetts. He was a cosignatory to the aforementioned Memorandum of Agreement (MoA). Green later served as the Fernald Liaison for the Waltham Historical Commission. He stepped down from the board in January 2017.

For three years, Green has conducted extensive research into the history of the Walter E. Fernald Developmental Center, identifying record locations, interviewing former staff, and researching available archives. He has authored numerous articles and reports on the history of the institution.

Green holds a Master's degree from the Harvard Kennedy School, and a B.A. from Brandeis University, where he majored in Anthropology with a concentration in Archaeology. He has conducted archaeological fieldwork in New England, Mexico, and Belize. He is a researcher at Harvard University.

## **3. Background**

The Walter E. Fernald Developmental Center was founded in 1848 in South Boston as the Massachusetts School for Idiotic and Feeble-minded Youth. It was the longest running and oldest public institution in the Americas for the care of people with intellectual and developmental disabilities.

In 1887, Dr. Walter E. Fernald was appointed superintendent of the institution. A year later, he began the process of moving the school to a 90-acre campus in Waltham. Under Fernald's leadership the practice of keeping pupils for life was radically expanded. The result is that a growing number of inmates died at the institution.

Fernald was aware of, and keenly sensitive to public oversight of the institution, and it seems likely that this would have extended to the handling of human remains. His attention to burials is corroborated by existing material included and discussed below. (See: Preliminary

Results of Archival Research) To date, however, it is unclear whether the school had specific policies for the handling of deceased inmates from the date of its inception until the creation of the MetFern Cemetery on the property of the Metropolitan State Hospital further west on Trapelo Road in 1947.

In the absence of definitive research, rumors have abounded regarding the potential presence of a cemetery on site in Waltham. These are fueled by the unsubstantiated mention of a possible cemetery location in the 1992 National Register Historic of Historic Places listing, authored by Candace Jenkins, which cites an area near the West Building—the institution's oldest existing structure—with a wrought-iron fence, as a possible burial location.

#### **4. Historical and Archaeological Analysis: Challenges and Avenues**

Current research that would provide answers to questions regarding the possibility and location of human remains at the Fernald has been slowed in large part by existing medical records laws that require vetting of existing state archive collections before they can be reviewed by independent researchers. At present, thousands of documents written by Fernald and his colleagues have been reviewed by the author, and yet they represent perhaps as little as five percent of the state's archives related to the institution.

Thus far, this research has not conclusively proved or disproved the existence of a cemetery on site, however, it has yielded important documents related to burial practices and the institution. The discovery of these documents, and the size of the remaining collection to be analyzed raises the question of whether human remains are located elsewhere at the site, and suggests that the definitive answer to all questions of human remains at the site will likely be answered definitively by the historical record, not archaeological survey.

To locate human remains via archaeological survey would require an exhaustive effort across the 196-acre parcel, since the size of the institution grew to include the entire existing parcel by the time of the 1947 construction of the MetFern cemetery. This is well outside the areas currently mentioned in the MoA or the NRHP listing. Such efforts would face challenges in locating possible remains in non-traditional burial sites, especially if remains were not placed in caskets or marked with headstones or other site markers. The work of precisely narrowing locations is further hampered by the absence, thus far, of specific locations for inquiry on site.

The need to look for remains in non-traditional and unmarked locations, given questions raised by the documentary evidence discussed below, as well as the broad history of informal burial practices at similar institutions nationwide, means that further research, first led by historical analysis, and later supported by archaeology as needed, would be necessary at the Walter E. Fernald National Register Historic District, prior to any site disturbance, whether a formal cemetery is located in the specific spot suggested by the NRHP listing or not.

#### **5. The Wrought-Iron Fence**

Under the leadership of Dr. Walter E. Fernald, the institution implemented a rigorous educational and training program for its students. While this program was based on earlier ideas already practiced in the institution, Fernald's intensive expansion of them came to include every aspect of daily life for the pupils. Core among these older ideas was "sense training,"

which Fernald grew to include a large program of gymnastic and physical exercises that revolutionized physical education in American public schools, and provided a precursor to the work of Maria Montessori.

In 1900, Kate Gannett Wells visited the institution and wrote a lengthy feature about what she observed for *The New England Magazine*. She notes these physical exercises, writing:

“These outdoor occupations include the training of the lowest grades of the defective persons, who dig ditches and make roads, or are saved from paroxysms of excitement by carrying stones from one pile to another and back, or by walking on a circular track.”

The wrought-iron fence described by the NRHP listing does not appear to resemble small institutional cemeteries known to the author anywhere else in New England. The location of the fenced area on a hillside with a large view, gently sloping from the front entrance of the West Building is suggestive. The West Building housed the institution’s most disabled patients for many years—those described by Wells—and it would seem likely that they would have been given a self-contained walking path within easy reach of the front doors.

The tree at the center of the wrought-iron area, the flat surface, and the small area, seem designed to provide a natural setting for a slow-moving person with severe disability. The rounded post-heads resemble attempts made across the site by Fernald, his architect, and their successors, to reduce sharp corners that patients might bump or fall into.

Most importantly, the West Building was the institution’s first building, and a source of pride for Fernald for many years. It seems unlikely that he would have located a cemetery within eyeshot of the front doors, given the effect it would have had on his charges, and on visitors. In addition, it seems odd, if the spot is indeed the location of a cemetery, that there is no mention of it any official records of the institution, despite the fact that the building was in continuous operation from the beginning of the 1890s until the 1960s. The absence of any markers further suggests that the spot is not a cemetery.

It seems more likely that the wrought-iron enclosure was a simple walking path. This does not, however, resolve the question of whether human remains are located elsewhere on site. Documents uncovered thus far suggest that Fernald looked elsewhere for burials than the existing site, and raise the question of where burials occurred if and when he was unsuccessful in locating alternative places for burials.

## 6. Preliminary Results of Archival Research

In the course of researching the institution, a number of documents suggest that the issue of burials concerned Walter E. Fernald, and that he may have had particularly strong feelings about the need to provide for proper burials for inmates, in cemeteries not segregated solely for the institution. These documents suggest that any mention of a potential burial onsite will likely be found within the 57 boxes of Fernald’s correspondence, which is, however, completely unorganized by date or subject, and which must be pre-read by the state archives prior to viewing by independent readers, in order to comply with medical records laws.

Among the documents uncovered thus far are the following:

- (1) A letter from Erskine Warden, an institution trustee, mayor of Waltham, and state representative, to Walter E. Fernald, dated May 24, 1898. The document appears to suggest that Warden sought to transfer cemetery plots to Fernald for his use at Waltham's municipal cemetery. 1898 was the year that state law changed regarding the disposition of unclaimed bodies. This change, which addressed "anatomical" material, would have forced Fernald to give bodies to medical institutions for anatomical research instead of burying them if they were unclaimed after 14 days. From the Warden letter:

My dear Dr. Fernald,

I enclose file for cemetery lot at Mt. Feake. Perhaps you should have a look: and I will see if the rules will allow me to transfer it to [the School?] at-all events this will give you [?] perpetual use"  
(Walter E. Fernald Correspondence, Massachusetts Commonwealth Archives, Box 2) (brackets inserted by author)

- (2) On May 28, 1910, Fernald was contacted in a general circular letter by John Warren, Professor of Anatomy at Harvard Medical School, and Harold Williams, Dean of the Tufts College Medical School, informing him that:

At the present time both Harvard and Tufts medical schools are greatly in need of anatomical material. I am therefore enclosing papers relative to the anatomical act for the use of bodies of unclaimed paupers. Will you kindly give this matter your attention and help us out as much as possible? Any such action will be greatly appreciated by both schools. [photo in Appendix]

A copy of a letter from Attorney General Hosea Knowlton was also included, noting that legislation required institutions to sell unclaimed bodies to medical colleges for a given price. (photo in Appendix A) (Walter E. Fernald Correspondence, Massachusetts Commonwealth Archives, Box 2)

- (3) On December 24, 1912, Fernald wrote to Rev. Timothy Brosnahan of Waltham's St. Mary's Parish:

I have wondered also whether it would not be possible to make some arrangements whereby children of your faith who die here and have no friends might be buried in your Catholic cemetery with the proper services? I suspect that it would be difficult in many cases with our feeble-minded boys and girls to state definitively that they had been baptized in the faith, and impossible to prove this to be the fact in many cases.

If, however, we knew that a certain patient was of your faith,  
would it be possible to make arrangements whereby the burial  
could be made in the Catholic cemetery with the proper services?

(Walter E. Fernald Correspondence, Massachusetts  
Commonwealth Archives, Box 2)

- (4) An undated “corpse ticket” form (Appendix A) from a large book of administrative material kept by Walter Fernald during his time as superintendent (1887-1924). (photo in Appendix A). The document seems to show that Fernald transported bodies elsewhere.

In addition to these documents, it is notable that deaths mentioned in the annual trustees reports prior to 1947, and in ancillary documents, indicate that many patients died at regional hospitals, or were conveyed to the pathology laboratory at the nearby Metropolitan State Hospital after it opened in 1930.

During the late 1910s, pathology work may have been conducted at the school by E.E. Southard, director of the Boston Psychopathic Department of the Boston City Hospital, who co-authored *The Waverly Researches* with Fernald. However, no pathology laboratory is noted earlier, and it seems likely that Southard, who died in 1920, would have conducted the work at the hospital, not at the school.

Initial survey of the Fernald collection suggests that it is unlikely that burials would have occurred in an improper fashion, and that the only bodies sent for anatomical research would have been those unclaimed by families. However, Walter Fernald was evidently challenged by the question of available burial sites. This necessitates a consideration of the notion that ad-hoc burials could have occurred in the absence of available burial sites. Given the detail of his correspondence, it seems likely that any on site burials will be mentioned and uncovered in the course of this research, though that could take years.

## 7. Thinking Beyond a Cemetery

As suggested above, should the historical record disprove the existence of a formal cemetery, it does not preclude the potential for individual burials somewhere on site. An archaeological investigation of the wrought-iron fence area will not disprove the potential for burials on-site, nor does a wider archaeological survey promise to yield definitive results given the size of the property.

Unfortunately, restricted access and the complete disorganization of the institutional archives make it impossible to conduct this work on an urgent basis. However, this fact has been known to the City of Waltham for three years, and can only be resolved by a planning effort that takes this known fact into account. This has not been done.

Further, it is important to note the NRHP’s misleading statement that the earliest periods of the institution’s presence in Waltham are the only periods worthy of investigation regarding human remains. Improper or ad-hoc burial practices could have occurred during any

period at the site prior to 1947, and were most likely to occur during periods of upheaval or transition, when institutional resources or capacity were overwhelmed or undersupported.

Examples of such periods include the 1918 flu pandemic, when large numbers of patients and staff died; the period following the death of Walter E. Fernald in 1924; the period following the opening of Wheatley Hall, a unit for babies, in the late 1920s; and the years of World War II, in which Superintendent Ransom Greene had little staff and was beyond retirement age, until such time as Malcolm Farrell took charge as superintendent in 1944.

## **8. Possible Locations of Historical Resources:**

### *MassArchives:*

Status of Research: Partially investigated (approximately 5%. High likelihood of resolving question of existence and location of cemetery and/or human remains)

### *Waltham cemetery records:*

Status of Research: Access not provided by Waltham City Clerk's office. Records said to be too fragile for observation. Current vital records database does not allow broad searches. Full research of these records, cross checked with state archive death indexes and the U.S. census would largely resolve question of existence and location of cemetery and or human remains, except for unrecorded burial locations, if any names cannot be cross-checked.

### *William G. Preston Architectural Collection (Boston Public Library):*

Status of Research: Full collection of original design drawings for the institution at Waltham up to 1910. Fully researched. No indication of a cemetery.

### *Sanderson Maps:*

Status of Research: Hand annotated maps by an eminent Waltham historian, located at the Waltham Historical Society. Available for research, not yet investigated by the researcher. Would not definitively disprove a cemetery or human remains for any dates after the drafting of these records, circa early 1900s.

### *DMR Records:*

Status of Research: Completely restricted.

### *Vital Records:*

Status of Research: Unanalyzed. See "Waltham cemetery records" above.

### *Fernald Maps & Plans:*

Status of Research: The City of Waltham is in possession of a historical collection of maps and plans of the institution that are supposed to be transferred to the MassArchives. They have not been investigated. The status of their transfer is unknown. They provide a chronological mapping of the entire campus throughout its entire history and would be a source for investigation if they have not been destroyed.

*NRHP report:*

Status of Research: It is unclear what Jenkins' source was for the wrought-iron fence comment. At the time of her writing, the West Building had been closed for approximately a quarter century. The comment is notable given the precision and accuracy of her work overall. It seems odd that Jenkins would have included the comment if she did not have some definitive corroborating proof that a cemetery is located at the wrought-iron fence.

*Annual Reports of the Trustees:*

Status of Research: Fully researched. Mention of deaths, but no mention of a cemetery or burying ground. Reports were discontinued during World War II and not started again until the opening of the MetFern Cemetery in 1947.

## **9. Municipal Resources for Conducting Historical Analysis**

To date, the City of Waltham has not allocated resources to conduct historical analysis of the Walter E. Fernald National Register Historic District, aside from one small parcel along Trapelo Road, since acquisition in 2014. All other historical work has been conducted by the author during his time on the board, and by other community volunteers. Fernald-related projects appear to have largely been directed, as this project appears to be, without consultation, planning, and/or comprehensive notification to the Local Historic Commission (WHC), the municipal planning department, or the city clerk's office, all of whom would be needed to coordinate a planned approach to addressing the issues raised herein.

## **10. Related Policy Issues**

Following a request to consider the site for the location of a future Waltham High School, the City of Waltham corresponded with the Massachusetts Historical Commission (MHC) from August to November 2016. Those discussions resulted in two letters from MHC; one in September and a second in November 2016.

The first letter encouraged the selection of a site that would not adversely affect the many historic resources on-site. The second noted that the City of Waltham had agreed to the Memorandum of Agreement (MoA) with the Commonwealth of Massachusetts in 2014 that requires an archaeological investigation of the site in order to prove or disprove the presence of a cemetery at the place mentioned in the NRHP listing or elsewhere.

There is a present need to consider human remains as a sitewide issue, as raised by the current request. The absence of coordinated planning and resources for historical analysis, along with an established record of difficulties in at the municipal level regarding policy compliance call into question whether the results of an arbitrarily and narrowly focused archaeological survey will be properly used, incorporated, and interpreted by the municipality for the purpose of settling the question of human remains at the site and adhering to existing agreements, laws, and statutes.

## **11. Conclusion**

Despite prevailing rumors, it is important to remember that few patients at the Fernald during the period in question were fully abandoned by their families. While family members were often denied access to loved ones, the institution knew the location of family members and had the resources to contact them in the event of the death of a loved one. This means that, among those who died at the Fernald during this time, relatively few bodies would have gone unclaimed. Fewer still would not then have been taken by the various medical colleges in the area.

It is also notable that the Fernald, despite its size, had over a century of uninterrupted existence in Waltham, with a large staff capable of transferring institutional knowledge from generation to generation. It seems likely that any formal burial ground would have been noted, remembered, located, or otherwise identified at some point in that history. The absence of this knowledge is suggestive, especially given the presence of advocates sensitive to the rights of people with disabilities going back roughly half a century.

To that point, it seems highly unlikely that the wrought-iron fence is a burying ground. The authority of the body of work by Candace Jenkins, author of the NRHP report, is the only reason to think otherwise. However, the West Building was subject to high scrutiny prior to its closure, including features in *the Boston Globe* in the 1960s, all of which, one presumes, would have mentioned the cemetery. In oral history interviews, staff members do not say that it was a cemetery, and it continues to seem unlikely that Walter Fernald would have placed a cemetery outside the front door of the building and never mentioned it in any formal piece of writing like a Trustees Report.

It is also notable that no major work on the Fernald definitively mentions a cemetery, and that other state school cemeteries were not opened until much later (Belchertown 1925; Medfield 1918; Wrentham; 1930s)

It seems likely that the historical record will definitively answer the question of the wrought-iron fence, and archaeological work could do the same. However, none of this information disproves the widened possibility created by the recent research documented above, of ad-hoc burials at the site during times of upheaval, crises, or urgency, or insufficient resources.

These questions should and must be resolved as part of stewardship of the national register historic district. The absence of allocated municipal resources and coordination to conduct the historical analysis that would definitively answer the questions posed regarding human remains at the Fernald should not be reason to conduct archaeological work that cannot adequately resolve the questions.

The consideration that there could be human remains elsewhere on site is informed by the concerning documentary fact that Walter Fernald appears to have needed assistance with burials, which raises the question of what he did in the meantime, when those burial locations were not forthcoming. It is likely that any development of the campus at the scale suggested by building a high school could disturb areas for inquiry, and it seems unlikely that archaeology will be able to cover such an area to resolve this question.

In sum:

- (1) It is unlikely that the wrought-iron fence area is a burial ground.

(2) While that can be easily proved or disproved by archaeological survey, it does not answer the broader question of the potential for human remains at the site.

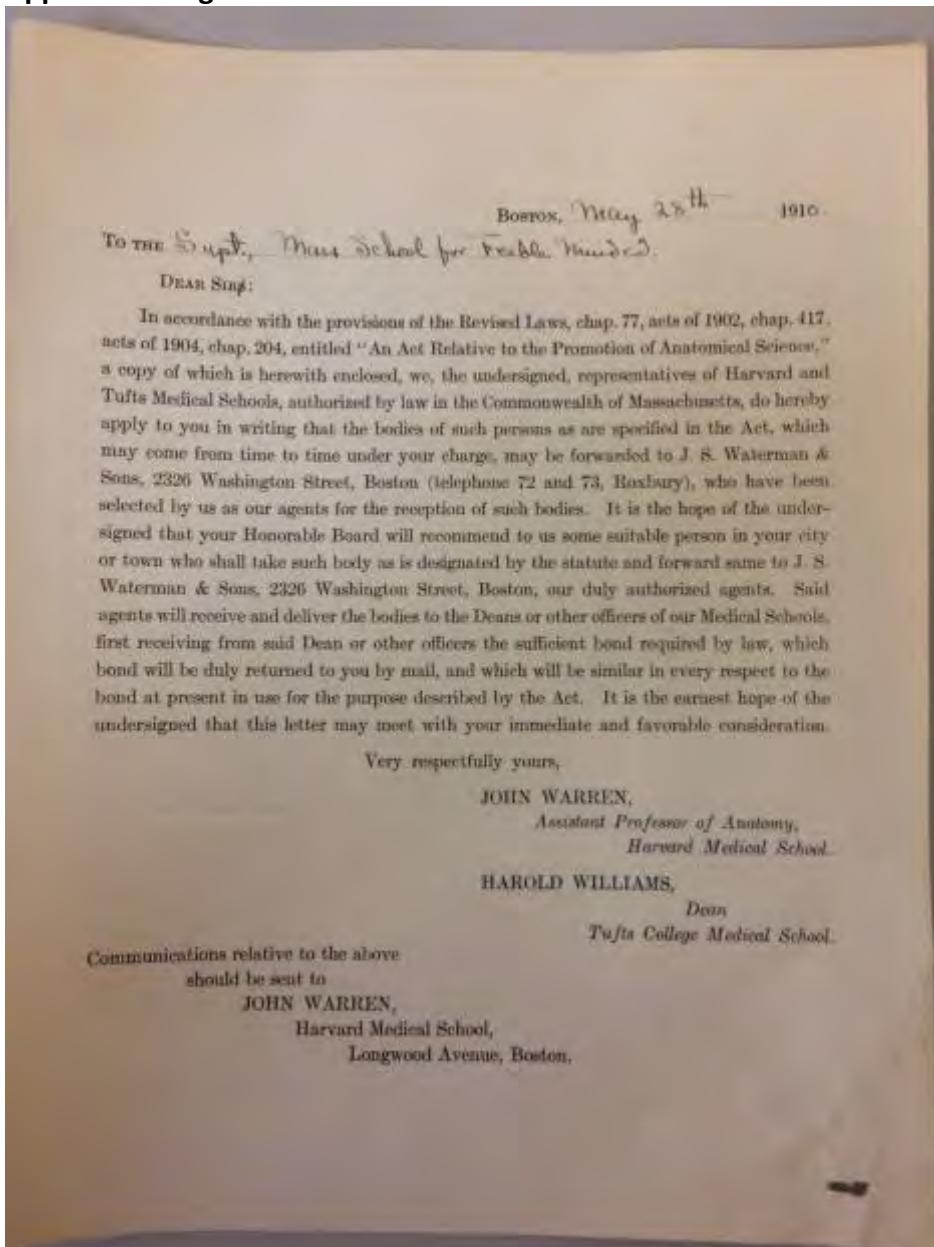
(3) Documentary evidence uncovered at the state archives, cited and included in this document, raises credible questions about the possibility that there are human remains elsewhere on the site.

(4) These questions and subsequent analysis suggest that the NRHP listing's suggestion that burials would have occurred between the 1880s and early 20th century is arbitrary and inaccurate. Instead, these questions apply sitewide to any area owned by the school between 1887 and 1947 (the full 196 acres), not just to the 'fenced-in' structure areas or areas around them.

(5) These questions, and any precise archaeological work can only be guided answered by further historical, not archaeological analysis.

(6) Until such time as answers can be provided, substantial disturbance of the area delineated as the National Register Historic District and governed by the conditions of the Memorandum of Agreement, either by archaeology or development, should not be undertaken.

## Appendix: Images of Historical Documents



## Commonwealth of Massachusetts.

In the Year One Thousand Eight Hundred and Ninety-Eight.

(Revised Laws, Chap. 77.)

Acts of 1902, chap. 417

Acts of 1904, chap. 204

### A N A C T

Relative to the Promotion of Anatomical Science.

*Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:*

SECTION 1. Upon the written application of the dean or other officer of any medical school established by law in this Commonwealth, the overseers of the poor of a city or town, the trustees for children of the city of Boston, the pauper institutions trustees of said city, and the insane hospital trustees of said city, the penal institutions commissioner of said city, the trustees and superintendent of the state almshouse, state farm, or other public institution supported in whole or in part at the public expense, except the Soldiers' Home in Chelsea, shall, in accordance with the provisions of this act, give such dean or other officer permission to take the bodies of such persons dying in such town, city, city institution, state almshouse, state farm, or public institution, as are required to be buried at the public expense, within three days of their death, to be used within the state for the advancement of anatomical science, provided that such permission shall not be given to take the body of any soldier or sailor known to be such who has served in the war of the rebellion, or in the war between the United States and Spain. In giving such permission, regard shall be had to preserving, as far as practicable, a fair proportion between the number of students in attendance at such institutions and the number of such bodies delivered to them respectively.

H.

(corr)

HOLLIS M. BLACKSTONE, Esq.,

*Superintendent State Farm.*

DEAR SIR:

Your letter of the 16th of November submits certain questions touching the construction of St. 1898, c. 479, s. 2 (Revised Laws, Chap. 77), entitled "An Act Relative to the Promotion of Anatomical Science."

The statute in question is mandatory. It is in substitution of the Revised Public Statutes, chapter 81, which was merely a permissive act. Under the Public Statutes, the Overseers of the Poor and other officials named in the act might, in their discretion, deliver bodies which otherwise must be buried at the public expense, for the purpose of dissection; but they were not compelled to do so. Under the statute of 1898, however, upon the application of the dean or other officer of a medical school established by law in this Commonwealth, such officers are required to surrender the bodies, which otherwise would have been buried at the public expense, for the use of such schools, upon the giving of a bond as prescribed in the statute. Such application having been made, the Overseers of the Poor and other officials enumerated have no right to bury the body at the public expense or to use the public funds for that purpose, but must, upon the receipt of a sufficient bond, deliver the body upon the application.

Your letter also inquires whether it is lawful to insist as one of the conditions that the body, after being used by the medical school, should be returned to those from whom it was received. The penal condition in the bond distinctly provides, following section 2 of the act in question, that the body must be kept for fourteen days for purposes of identification, and that after having been used for the promotion of anatomical science "the remains shall be decently buried." This requirement, which is one of the conditions of the bond to be given, prohibits the return of the body.

I enclose a form of bond which I have had printed for use of institutions included in the provisions of the act. It is not for this office to fix the amount of the bond, but I see no reason why a penalty of \$100 for each body, which, I understand, has been the usual sum in such cases, is not sufficient.

Yours very truly,

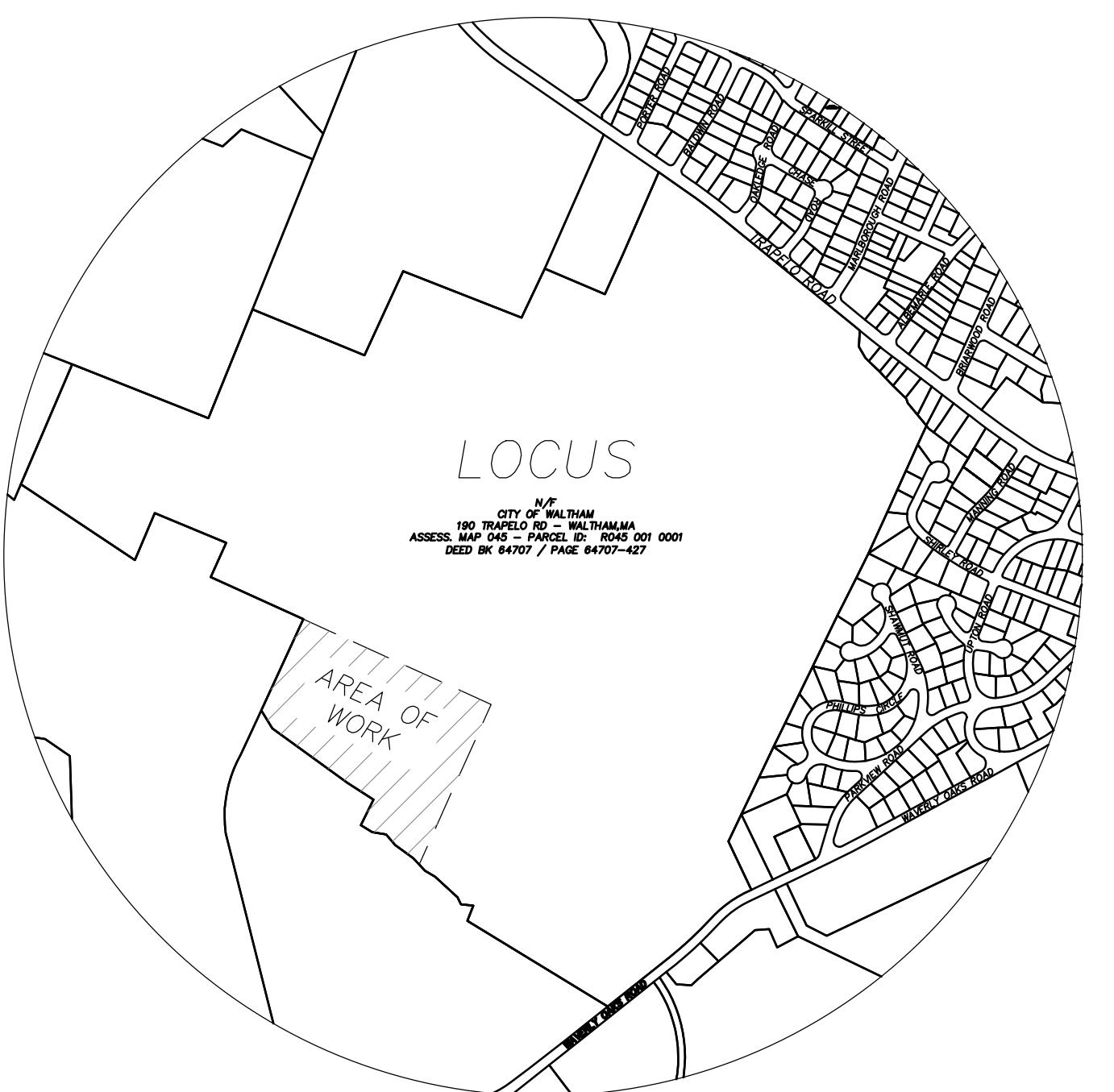
(Signed) HOSEA M. KNOWLTON,  
*Attorney General.*





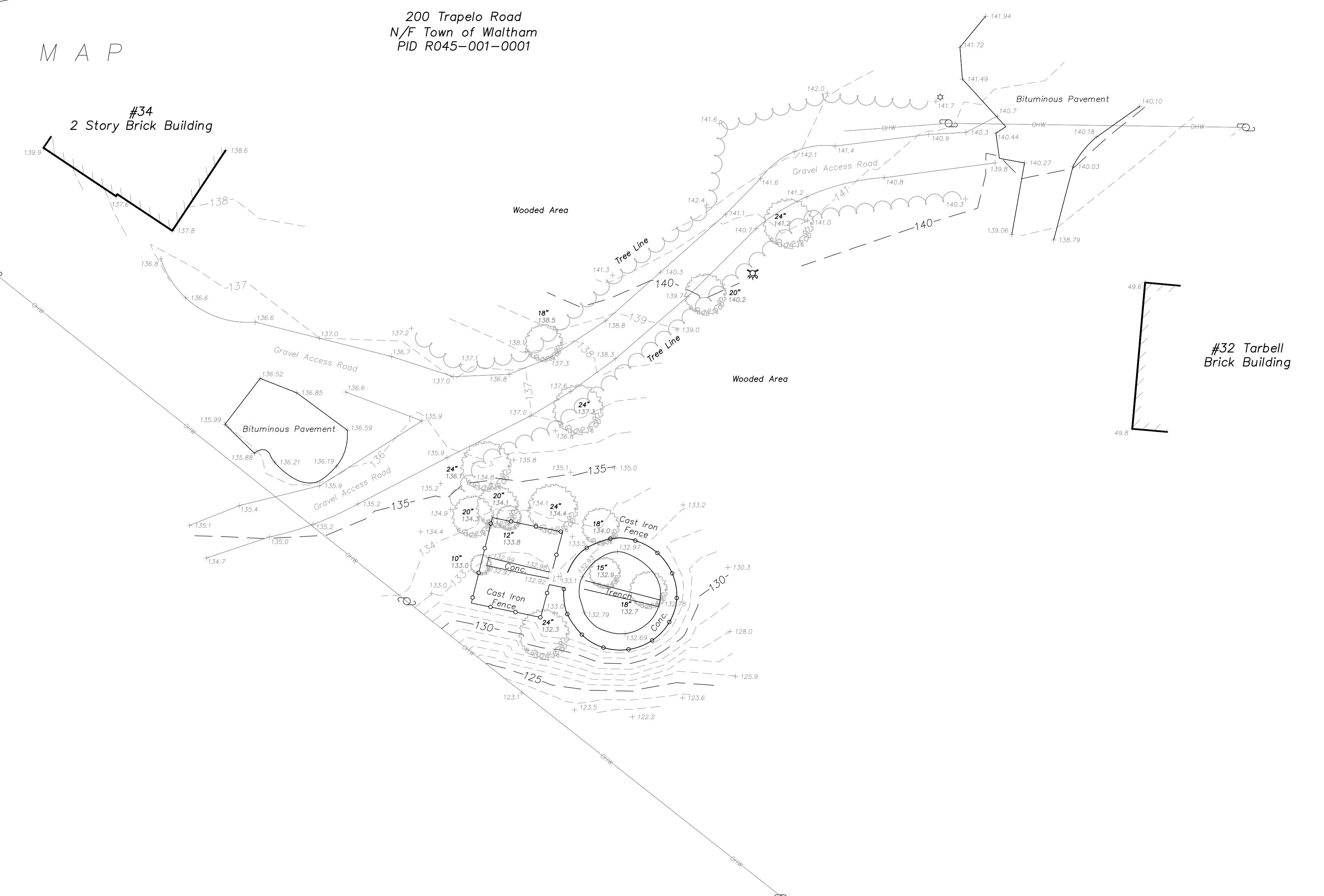
**APPENDIX B: PROFESSIONAL SURVEY MAP OF THE  
PROJECT AREA SHOWING THE LOCATION OF THE  
FENCED AREAS, THE TWO EXCAVATED TRENCHES, AND  
NEARBY BUILDINGS.**





VICINITY MAP

200 Trapelo Road  
N/F Town of Waltham  
PID R045-001-0001



- NOTES:**
1. THIS PLAN IS REFERENCED HORIZONTAL TO THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 AND VERTICALLY TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 BY RTK GPS OBSERVATIONS TAKEN ON AUGUST 17th, 2017.
  2. THIS PLAN IS THE RESULT OF AN INSTRUMENT SURVEY PERFORMED ON AUGUST 17th, 2017.
  3. ABUTTERS' NAMES REFER TO CURRENT CITY OF WALTHAM ASSESSOR'S RECORDS.
  4. THE SUBJECT LAND AS SHOWN LIES PARTIALLY WITHIN ZONE X, AREAS DETERMINED TO EXIST OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN AS INDICATED ON PANEL 414 FOR THE CITY OF WALTHAM, COMMUNITY NO. 250222, HAVING AN EFFECTIVE DATE OF JUNE 4th, 2010.
  5. THE CURRENT RECORD OWNER IS TOWN OF WALTHAM. FOR LOCUS DEED, SEE BOOK 64707 PAGE 430 RECORDED AT THE MIDDLESEX SOUTH COUNTY REGISTRY OF DEEDS.
  6. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE SEARCH AND MAY NOT SHOW OR REVEAL ANY FACTS THAT WOULD BE DISCLOSED BY ONE.
  7. THIS PLAN IS NOT INTENDED TO REPRESENT A BOUNDARY RETRACEMENT SURVEY.

Fernald School  
200 Trapelo Road  
Waltham, MA

PROGRESS  
DRAFT 8-29-17

REVISION

Limited  
Topographic  
Plan

JOB # 17114.00	EX-1.1
DATE: 8-29-17	
SCALE: 1"-20'	
DRAWN BY: CY	
APPROVED BY: TMC	
SHEET 1 OF 1	